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OP 14

Formulation of an oral rinse containing *Garcinia zeylanica* aqueous extract and determination of its efficacy against *Staphylococcus aureus*, *Klebsiella pneumonia* and *Acinetobacter baumannii*

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Background: *Garcinia zeylanica* (Ela-goraka) is endemic to Sri Lanka. Although the antimicrobial activity of *Garcinia zeylanica* has been reported, the efficacy of an oral rinse containing this extract has not been investigated.

Objectives: The aim was to formulate an oral rinse using *Garcinia zeylanica* aqueous extract and to determine its anti-bacterial activity against selected pathogens.

Methods: Four decoctions containing *Garcinia zeylanica* were prepared by adding 30 g (A), 60 g (B), 90 g (C), and 120 g (D) of dried pericarp into 240 mL of distilled water and refluxing for 1 hour. These decoctions were tested against microorganisms; *Staphylococcus aureus* (ATCC25923), *Acinetobacter baumannii*, and *Klebsiella pneumonia* (Clinical isolates) using well diffusion assay. Distilled water was used as the negative control. Decoctions C and D gave zones of inhibition for all 3 pathogens and therefore C was chosen for the formulation considering its mean zones of inhibition and least use of material. Decoction C (20 mL) was reduced by boiling to 10 mL to obtain a double concentrated decoction. Formulations were prepared (5%w/w) as per Badische Anilin und Soda Fabrik Corporation mouth wash formula (BASF) using the single and double concentrated decoction C. Colour, odour, pH and antimicrobial activity of the 5%w/w formulations were recorded. Sterility test was done for the formulation. Mean zones of inhibition (ZOI) were determined. All tests were triplicated.

Results: The mean ZOIs of double concentrated decoction C against *S. aureus*, *A. baumannii* and *K. pneumoniae* were 23±1 mm, 14±1.15 mm and 16±1 mm respectively. 5% single concentrated mouthwash gave no activity. Therefore the 5% double concentrated formulation was selected. The mean ZOIs against selected panel were 16±1 mm, 15±1 mm, and 13±0.6 mm respectively. Sterility test showed no microbial contamination.

Conclusions: *Garcinia zeylanica* (5%) based oral rinse had in vitro anti-microbial activity against the selected oral pathogens. Further, evaluation of the stability and shelf life of this formulation is needed.

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A collaborative study of pharmacotherapy of schizophrenia in Asia: Findings from Sri Lanka

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Background: This paper aims to present the prescription patterns of pharmacotherapy of schizophrenia from three centres in Sri Lanka that took part in the international collaborative study "Research on Asian Psychotropic Prescription Patterns for Antipsychotics IV, REAP-AP4".